

Modular Notebook and PDA Computer Systems for Personal Computing and Wireless Communications

ABSTRACT

5 A small light weight modular microcomputer based computer and communications systems,
designed for both portability and desktop uses. The systems make use of a relative large flat panel
display device assembly (2), an expandable hinge device (10), battery power source (9), keyboard
assembly (16), and wireless communications devices (32, 51). The systems are capable of
10 bi-directional realtime communications of voice, audio, text, graphics and video data. Both
wire-based or wireless communications methods and devices are implemented. Wireless
communications devices may include one or more telephone-like handsets (14) and/or earset (34).
The wireless communication devices may include one or more antennae (32). Systems can be
configured in a portable arrangement similar to conventional notebook computers, but can be
quickly and easily disassembled and re-assembled for office desktop uses. Systems may consist of
15 a base computer unit (100) comprising wireless communication devices may act as a relay station
relaying voice and other data between the handset or earset and external wide area
communications networks. The system may be capable of performing, personal digital assistant
(PDA), cellular telephone, conventional notebook computer, desktop computer functions.